



Product: [72002NH](#)

DataTuff® 5E, 2PR #26 Str BC, PO ins, SF/UTP, LSNH Jkt, AWM 21286

Product Description

DataTuff® 5E, 2 Pair AWG 26 Bare Copper - Stranded, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, LSZH / FRNC jacket , AWM 21286

Technical Specifications

Product Overview

|                        |                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------|
| Suitable Applications: | Cat5e, harsh environment, IIoT, factory or process automation, video, audio, data communication, etc. |
|------------------------|-------------------------------------------------------------------------------------------------------|

Construction Details

Conductor

| Size   | Stranding | Material         | No. of Pairs | No. of Elements |
|--------|-----------|------------------|--------------|-----------------|
| 26 AWG | 7x0.16 mm | BC - Bare Copper | 2            | 4               |

Insulation

| Material          | Nom. Insulation Diameter | Color Code                               |
|-------------------|--------------------------|------------------------------------------|
| PE - Polyethylene | 0.98 mm (0.039 in)       | White/Blue & Blue, White/Orange & Orange |

Cable Core

| Description                                                               |
|---------------------------------------------------------------------------|
| 2 pairs and 2 fillers twisted to cable core covered with a polyester foil |

Outer Shield

| Shield Type | Material                | Coverage |
|-------------|-------------------------|----------|
| Tape        | Bi-Laminate (Alum+Poly) |          |
| Braid       | Tinned Copper (TC)      | 80%      |

|              |                  |
|--------------|------------------|
| Table Notes: | Aluminum outside |
|--------------|------------------|

Outer Jacket

| Material                                        | Nom. Diameter  |
|-------------------------------------------------|----------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 6 mm (0.24 in) |

|                                   |                |
|-----------------------------------|----------------|
| Overall Cable Diameter (Nominal): | 6 mm (0.24 in) |
|-----------------------------------|----------------|

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Mutual Capacitance | Max. Capacitance Unbalance | Nom. Characteristic Impedance |
|--------------------|-------------------------|----------------------------|-------------------------------|
| 140 Ohm/km         | 56 pF/m (17 pF/ft)      | 160 pF/100m                | 100 Ohm                       |

Delay

| Max. Delay Skew | Nom. Velocity of Prop. |
|-----------------|------------------------|
| 40 ns/100m      | 60%                    |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. ACRF (ELFEXT) [dB] | Min. RL (Return Loss) [dB] |
|-----------------|-----------------------------------|----------------|-------------------------|----------------------------|
| 0.772           |                                   | 67             |                         | 19.4                       |

|       |              |      |      |      |
|-------|--------------|------|------|------|
| 1     | 3.2 dB/100m  | 65.3 | 63.8 | 20   |
| 4     | 6 dB/100m    | 56.3 | 51.8 | 23   |
| 10    | 9.5 dB/100m  | 50.3 | 43.8 | 25   |
| 16    | 12.1 dB/100m | 47.2 | 39.7 | 25   |
| 20    | 13.6 dB/100m | 45.8 | 37.8 | 25   |
| 25    | 15.3 dB/100m | 44.3 | 35.8 | 24.3 |
| 31.25 | 17.1 dB/100m | 42.9 | 33.9 | 23.6 |
| 62.5  | 24.8 dB/100m | 38.3 | 27.9 | 21.5 |
| 100   | 32 dB/100m   | 35.3 | 23.8 | 20.1 |

Voltage

| Voltage Rating        |
|-----------------------|
| 450 V DC and 300 V AC |

Mechanical Characteristics

Temperature

| Operating      | Installation  | Storage        |
|----------------|---------------|----------------|
| -40°C to +80°C | -5°C To +50°C | -40°C To +80°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 30 mm (1.2 in)  | 60 mm             |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 40 N (9.0 lbf) |
|--------------------|----------------|

Standards and Compliance

|                                  |                                                                                                                                                                                                              |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor - Euroclass Eca, Sunlight Resistance, Oil Resistance                                                                                                                                                  |
| Flammability / Reaction to Fire: | IEC 60332-1-2                                                                                                                                                                                                |
| CPR Compliance:                  | CPR Euroclass: Eca; CPR UKCA Class: Eca                                                                                                                                                                      |
| Data Category:                   | Category 5e                                                                                                                                                                                                  |
| TIA/EIA Compliance:              | ANSI/TIA 568.2-D                                                                                                                                                                                             |
| ISO/IEC Compliance:              | ISO/IEC 11801-1                                                                                                                                                                                              |
| CENELEC Compliance:              | EN 50173-1                                                                                                                                                                                                   |
| European Halogen Free Standards: | IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance:   | EU CE Mark                                                                                                                                                                                                   |
| UK Regulation Compliance:        | UKCA Mark                                                                                                                                                                                                    |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.265 Revision Date: 04-29-2024 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #         | Color | Putup Type | Length | EAN           |
|----------------|-------|------------|--------|---------------|
| 72002NH.02B100 | Black | Flat Box   | 100 m  | 8719605012845 |
| 72002NH.02305  | Black | Reel       | 305 m  | 8719605012821 |
| 72002NH.02500  | Black | Reel       | 500 m  | 8719605012838 |

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